

# Git CheatSheet

## TOOLS

- PDF Link: [cheatsheet-git-A4.pdf](#), Category: tools
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-git-A4>
- Related posts: Shell CheatSheet, [#denny-cheatsheets](#)

File me Issues or star this repo.

## 1.1 Git Advanced

Name	Comment
Git squash to make history clean	<code>git rebase -i HEAD~4; git push origin &lt;branch-name&gt; --force</code>
Find git branch by commit hash	<code>https://\protect\T1\textdollar\protect\T1\textbraceleftgit_repo_link\protect</code>
List all remote git branches	<code>git ls-remote --heads origin</code>
Git clone repo with another ssh key	<code>ssh-agent bash -c 'ssh-add yourkey; git clone git@github.com:user/project.git'</code>
Code Owners	Define individuals or teams that are responsible for code in a repository.

## 1.2 Git Commit

Name	Comment
Git squash to make history clean	<code>git rebase -i HEAD~4; git push origin &lt;branch-name&gt; --force</code>
Git commit and squash	<code>git commit --amend --no-edit, git push origin &lt;branch-name&gt; --force</code>
Git add patch	<code>git add -p</code>
Git commit	<code>git commit -m 'XXX'</code>
Git add and commit	<code>git ci -m 'XXX'</code>

<https://raw.githubusercontent.com/dennyzhang/cheatsheet-git-A4/master/git-concept.png>

## 1.3 Git Undo

Name	Comment
Undo git commit	<code>git reset --hard HEAD~1</code>
Undo git pull	<code>git reset --hard</code>
Undo git add	<code>git reset filename.txt</code>
Undo git merge	<code>git merge --abort</code>

## 1.4 Git log

Name	Comment
Check recent commits	<code>git log -n 3</code>
Check commit by username	<code>git log origin/master -n 3 --author &lt;denny&gt;</code>
Check changes for a given file from a given user	<code>git log origin/master -n 3 --author &lt;denny&gt; &lt;somefile.py&gt;</code>

## 1.5 Git Diff

Name	Comment
Compare git diff after commit	<code>git diff --cached</code>
Compare two git tags	<code>git diff \${sha1sum}..\${sha2sum}</code>
Show changed file list	<code>git diff --name-status, git diff --name-status --cached</code>
Git diff two revision	<code>git diff \${sha1sum}..\${sha2sum}</code>
Git show file changes	<code>git diff --name-only \${sha1sum} \${sha2sum}</code>
Show changeset of the latest commit	<code>git diff HEAD~</code>
Show previous changeset for one file	<code>git diff HEAD~ default.rb</code>
Compare two branches in CLI	<code>git diff &lt;branch_1&gt;..&lt;branch_2&gt;</code> Make sure you have those branches locally
Compare two revision in GitHub UI	<a href="https://github.com/.../.../compare/sha1...sha2">https://github.com/.../.../compare/sha1...sha2</a>
Compare latest 3 commits in GitHub UI	<a href="https://github.com/dennyzhang/cheatsheet-git-a4/compare/HEAD~3...HEAD">https://github.com/dennyzhang/cheatsheet-git-a4/compare/HEAD~3...HEAD</a>

## 1.6 Git Config

Name	Comment
Show git config	<code>git config --global/system</code>
Configure default editor	<code>export pager=cat, git config --global core.editor nano</code>
Edit git global config	<code>git config --global --edit</code>
Alias for git status	<code>git config --global alias.st status</code> Link: git aliases
Alias for git checkout	<code>git config --global alias.co checkout</code>
Alias for git commit	<code>git config --global alias.ci commit</code>
Reset git url	<code>git config --global url."git@github.com:dennyzhang/myrepo.git:".insteadOf "https://git</code>
Reference	GitHub: gitignore examples

## 1.7 Git Branch

Name	Comment
List all remote git branches	<code>git ls-remote --heads origin</code>
Delete local branch	<code>git branch -d &lt;branch_name&gt;</code>
Delete remote branch	<code>git push origin --delete &lt;branch_name&gt;</code>

## 1.8 Git Tag

Name	Comment
Git list all tags	<code>git ls-remote --tags</code>
Git Fetch all tags	<code>git fetch --tags; git checkout tags/&lt;tag_name&gt;</code>
Git delete local tag	<code>git tag -d &lt;tag_name&gt;</code>
Git delete remote tag	<code>git push --delete origin &lt;tag_name&gt;</code>

## 1.9 Git Submodule

Name	Comment
Git add a repo to current repo	<code>git submodule add &lt;git_repo_url&gt;</code>
Update submodule	<code>git submodule update</code>

## 1.10 GitHub

Name	Comment
Github Shortcut	Link: Using keyboard shortcuts
Generate TOC	gh-md-toc
Reference	link: generate link for code block, link: git clone wiki repo

## 1.11 More Resources

<https://github.com/git-tips/tips>

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